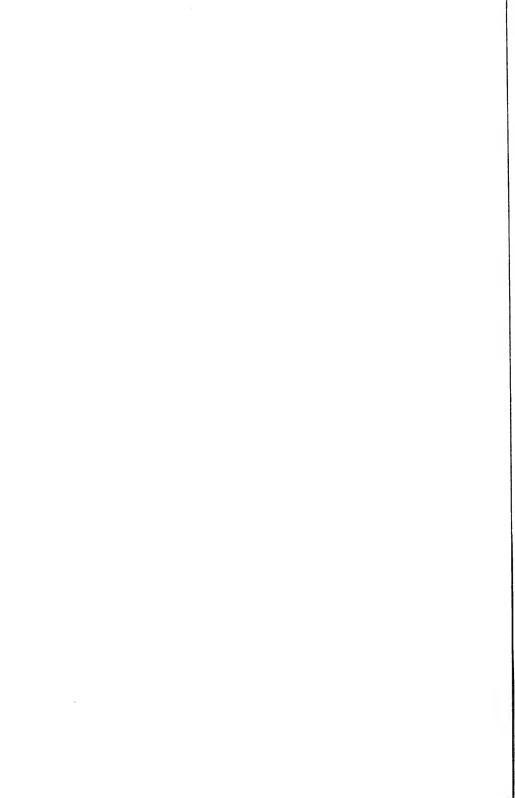
P Astron

## TORONTO

# GENERAL METEOROLOGICAL REGISTER

FOR THE YEAR 1900.



#### METEOROLOGICAL RESULTS REMARKS ON THE AT TORONTO FOR THE YEAR 1900

## TEMPERATURE.

The mean temperature of the year 1900 was 46°.89, being 2°.56 warmer than

the average of 60 years and 1006 warmer than 1809.

The mean temperature of the several months was in ten instances above and in two below the average for the respective months, the average excess to the average defect being in the ratio of 30.78 to 30.56. On each of 239 days the mean temperature was above the normal of that particular day and below on 126 days. The mean temperature of each month, with the difference from the normal, was: January, 26°22+3°74; February, 20°64-1°88; March, 23°59-5°23; April, 45°18+4°00; May, 54°86+2°49; June, 65°16+2°65; July, 68°47+6°69; August, 71°57+5°22; September, 63°73+5°04; October, 55°67+9°12; November, 38°29+2°03; December, 29°31+2°87. Dividing the year into the ordinary seasons we have for Winter, 23°48; Spring, 55°07; Summer, 67°92; Autumn, 11°90. The thermic anomalies differ from the normal temperature proper to the 41°09. The thermic anomalies differ from the normal temperature proper to the latitude; Winter,—12°38; Spring,—2°57; Summer,+1°69; Autumn,—3°24. In four months during the year the observed temperature exceeded the normal value for the latitude, viz.: June, o '56; August, 3' o7; September, 2' 23; October, 1' 87. The mean daily range for the year was 16' 70, the greatest monthly average occurring in July (21° 46) and the least in November (10.76). The greatest daily range (37°6) occurred on the 2nd May, and the least (3°7) on the 14th January. The warmest month relatively was October, estimated by its excess (9°12) above the normal, August the warmest absolutely (71"57). The coldest absolutely was February (20.64). March was the coldest relatively, its mean being 5.23 below the normal.

The climatic difference was 50'93, the warmest day was the 8th of August, mean temperature, 84 o7, and the coldest the 26th February 4 15; but the warmest day relatively was the 8th February, it being 21-3 above its proper normal, and the coldest the 26th February, which was 28 2 below the normal. The average temperature of the warmest and coldest days from former years was 78°06 and 2°20 below zero. The highest temperature of the year (98°0) occurred on the 6th August, and the lowest (9.6 below zero) on the 26th of February. The annual range from these extremes was 107 6, being 3 5 more than 1800 and 4 4 more than the average annual range. There were 45 instances in which the tempe ature of the hour of observation was 20 above the normal and 30 when a defect of equal amount occurred. The most striking deviations from the daily normal curve of temperature have been as follows:

#### IN EXCESS.

			111 131				
			0				
January	5, ]	Mean Deviatio	on	⊱eptemb	er:6. M		tion
do	7	do	17 9	October	2	do	12 8
do	14	do		do	3	do	13 7
do	15	do	12.4	do	4	do	1419
do	16	do	12 5	do	5	do	18:3
do	18	do	14.3	do	6	do	
do	19	do	18.3	do	7	do	16.2
ob ob	20	do		do	15	do	12.6
do	•)•)	40	16 5	do	22	do	
February		do		do	23	do	19 6
do	ś	do	12 1	do	24	do	
do	12				25	do	
		do	15.8	do			
April	18	do	14.1	do	26	do	17 1
do	23	do		do	27	do	
May	13	do		do	28	do	
do	14	(lo	20.1	do	29	do	15.4
do	1á	do		do	31	do	
August	6	do	14.6	Novembe	e <b>r</b> l	do	1319
<b>d</b> o	8	do	15.7	do	-1	do	12 6
do	10	do	14 7	do	18	do	
do	31	do	13 4	do	2.1	do	13.5
do	25	do	12 8	do	21	do	
do	26	do		Decembe	er 19	do	
Septembe		do	13 8	do	1)1)	do	
do	1 6	do	12.3	do	23	do	
do	17	do	11.2	do	24	do	
an	1.1	110	14.8	(LO	-1	110	

#### IN DEFECT.

			0				
January	25, Mean						
do	91)	do	 .13*2	do	15		
do	31	do	 .16:0	do	16		16.6
February	]	do	 .1812	do	17		
do	16	do		November			12.3
do	25	ďο	 .2018	December	14		0 1
do	26	do	 .28 2	do	15		
do	27	do		do	16	do	
March	5	do	 .15.8				
do	11	do	 .19:3				
do	12	do	 .14 9				

#### BAROMETRIC PRESSURE.

The mean height of the Barometer was 20'621 inches, being o'oot inches above the average. The month which showed the greatest deviation from the normal was October, o'too in excess; September showing the least, o'oo6. Average deviation without reference to sign was small, being only o'o 33. The highest reading was 30'224 at 2 p.m. of February 27th, and the lowest 28'802 at 4 p.m. of February 22nd, giving a range of pressure of 1'422 inches.

The number of days of large abnormal variations in which the average pressure differed by two-tenths and upwards from the normal was 111 the greatest number (15) occurring in March and the least (3) in May, July and August.

#### HUMIDITY.

The mean humidity of the year was 76, being equal to the average, the greatest monthly humidity was 83, in October, and the least, 66 in May. There were 14 cases of complete saturation at the hour of observation; 4 in January, 4 in April, 1 in May, 1 in July, 2 in October and 2 in December. The least humidity of the year at the hour of observation was 22 on the 5th of May, at 4 p.m.

#### CLOUDS.

The extent of the sky clouded was on the average of the year six-tenths of the whole. June was the clearest month and December the most cloudy. During the year there were 51 days completely clouded, being 13 less than the average (1853-99), the greatest number (11) occurring in December, none being registered in the months of May and July.

#### WIND.

The resultant direction of the wind was S. 88" W., showing 11° less southing than in 1899, and 31° more southing than in the seventeen years to 1890. The mean velocity of the wind without reference to direction was 10°67 miles. The most windy month was February, with an average of 14°29 miles per hour, and the least windy was September, with an average of 6°78 miles. The windiest day was March 6th, average velocity 29°71 miles per hour, and the day of least velocity was January 15th, average velocity o'13 per hour. The highest velocity in one hour was 45°0 miles, 4 to 5 a.m. of the 12th September.

#### RAIN AND SNOW.

The total depth of rain that fell during the year was 22 130 inches, being 5016 inches less than the average, and 3665 less than the rainfall of 1890. The depth of snow, 746 inches, was 72 inches more than the average, and 428 inches more than the snowfall of 1899. November was the most rainy month as to quantity (3025), and July and November with reference to the number of rainy days. January was the least rainy month, only 0470 inches having fallen.

The day of greatest rainfall was the 6th of March, when 1440 inches fell. There were only two other days during the year on which over one inch fell.

The heaviest fall of snow in one day was 100 inches on the 28th of February. Rain fell on 99 days, being 5 less than the average number, and 6 less than in

1899. Snow (cil on 42 days, being 24 less than the average and 2 more than in 1899. There were 187 days on which neither rain or snow fell; in 1899 the number was 185. The rain oc upied 442 hours, and the snow 290 hours in its fall, giving a total of 668 hours, or 29 days and 21 hours when rain or snow was actually falling.

## THUNDER-STORMS.

Of the 24 thunder-storms occurring during the year, the first was on the 18th of April, and the latest on November 21st, 1 in April, 3 in May, 2 in June, 9 in July, 8 in August, 8 in September, 2 in October, and 1 in November. The most severe storms were on the 11th and 29th July, 9th August, 6th and 21st September. Lightning alone the 4th July and 26th August.

#### AURORA.

Auroral displays were less numerous than the previous year. Of the three observed, 1 of the 3rd class and 2 of the 4th class. There were 224 nights favourable for observation. The most brilliant display occurred on the 4th May.

#### SUNSHINE.

The total duration of bright sunshine during the year was 2305.5 hours; number of hours the sun was above the horizon, 4463.3; ratio of registered to possible, 0.52.

## GENERAL METEOROLOGICAL

MAGNETICAL OBSERVATORY,

Latitude 43° 39′ 4 N. Longitude 5h 17m 20′65 West Elevation

	JAN.	FE :.	MAR.	APRI	$M \cdot \boldsymbol{x_*}$	June.	JULY.
Average temperature	$ \begin{array}{r} 20.22 \\ + 3.74 \\ - 6.58 \end{array} $	20°.64 1.88 14.06	23.59 - 5.23 -16.51	$\begin{array}{c} 45^{\circ}18 \\ +4.00 \\ -5.02 \end{array}$		65 <sup>2</sup> 16 + 2:65 + 0:56	$-68^{\circ}.47$ $-0.69$ $-0.23$
Highest temperature. Lowest temperature. Monthly and annual ranges. Average maximum temperature. Average minimum temperature. Average daily range. Greatest daily range.		$\begin{array}{r} 43.0 \\ -9.6 \\ 57.6 \\ 27.16 \\ 12.72 \\ 14.44 \\ 26.0 \end{array}$	$\begin{array}{c} 43.8 \\ -3.0 \\ 46.8 \\ 31.20 \\ 15.44 \\ 15.76 \\ 29.4 \end{array}$	70.7 21.3 49.4 53.11 37.23 15.88 28.4	87 5 30 5 57 0 65 62 44 65 20 97 37 6	89 4 44*4 45*0 75 54 54 81 20 <b>7</b> 3 35 4	94.4 48.1 46.3 79.91 58.45 21.46 35.4
Average height of barometer at 32° Fahr. Diff-rence from average (59 years) Highest barometer Lowest barometer Monthly and annual ranges	29 6041 - 0046 30 083 28 992 1 091	29 5698 0686 30 224 28 802 1 422	29:6231 +:0148 30:192 28:937 1:255	$\begin{array}{c} 29^{\circ}6484 \\ + 0468 \\ 30^{\circ}004 \\ 29^{\circ}289 \\ 0^{\circ}715 \end{array}$	29:5693 : 0068 20:910 29:196 0:714	29 5649 0082 29 860 29 211 0 619	29:5607 -: 0271 29:834 24:094 0:740
Average humidity of the air	- \$2 - 1	- <sup>80</sup> - 1	- <sup>76</sup> 2	- <sup>67</sup> - <sup>3</sup>	- 66 - 4	- <sup>71</sup> <sub>2</sub>	72 0
Average elasticity of aqueous vapour Average temperature of dew point	0:126 23:5	0.103	0°103 19°0	0:206 35:3	0°2 8 4 <b>4</b> °9	0 435 55 1	0:496 58:8
Average of cloudiness Difference from average (46 years)	0·72 -·02	0·59 -·10	0:51 :12	0.52 06	0 57 - 00	0:40 12	0:48 02
Resultant direction of wind.  Resultant velocity of wind.  Average velocity (miles per hour)  Highest velocity in month and year	S 60 W 7·25 11·39 43·0	West 4.69 14.29 41.0	N 81 W 5.89 13.04 41.0	N 72 W 3 28 9 98 31 0	N 3Î W 0·98 12·35 36·0	S 85 W 2·26 9·62 27·0	S 78 W 3:71 7:61 26 0
Total amount of rain in inches	0.470 -0.742 8	2:140 +1:242 7	1.620 +0.153 3	1:830 -0:304 11	0.995 -2.038 6	2·425 -0·373 9	$\begin{bmatrix} 2.730 \\ -0.191 \\ 12 \end{bmatrix}$
Total amount of snow in inches  Difference from average (60 years)  Number of days of snow	$-{14.7\atop -2.30\atop 12}$	30·7 +13·71 8	$+{}^{18:3}_{6:33}$	* - 2.39	- 0°12		
Number of fair days Number of days completely clouded	10 9	13 9	15 4	16 3	19 0	18	17 0
Number of auroras observed	111	0 17	1 21	0 18	1 16	0 23	0 22
Number of thunder storms	0 5	0 3	0 0	1 4	3 0	2	9
Number of hours of bright sunshine Number of hours of possible sunshine		107 8 291 4	175 9 369 9	221·7 403·5	254 9 461 1	327:0 465:7	287 · 5 470 · 9

## REGISTER FOR THE YEAR 1900.

TORONTO, ONTARIO.

above Lake Ontario, 103 feet. Elevation above the Sea, 350 feet.

Aug.	Sept.	OCT.	Nov.	Dgc.	1900.	1899.	1848.	1897.	18 6.	1895.	1594.
$71^{\circ}57 + 5.22 + 3.07$	$\begin{array}{r} 63^{\circ}73 \\ +5.04 \\ +2.23 \end{array}$	55°67 9·12 1·87	$   \begin{array}{r}     88 \overset{\circ}{29} \\     + 2 \overset{\circ}{03} \\     - 4 \overset{\circ}{91}   \end{array} $	$\begin{array}{c} 29 \ 31 \\ + \ 2 \ 87 \\ - \ 6 \ 6 \end{array}$	$\begin{array}{r} 46  89 \\ +  2  56 \\ -  4  13 \end{array}$	45 <sup>83</sup> + 1 50 - 5 19	$\begin{array}{c} 47^{\circ}15 \\ \div & 2.82 \\ -3.87 \end{array}$	$\begin{array}{r} 45^{93} \\ + 160 \\ - 500 \end{array}$	$\begin{array}{c} 45.5 \\ \pm 1.03 \\ \pm 5.66 \end{array}$	$-44^{\circ}28$ $-6.05$ $-6.74$	46°75 - 2 42 - 4°27
98:0 51:3 46:7 81:30	91.7 44.0 47.7 72.80	83:0 25:9 57:1 61:40	64°8 14°1 50°7 43°91	$-{}^{48}_{115}$ $-{}^{15}_{119}$ ${}^{35}_{35}$	98 0 - 9 6 107 6	92·1 -12·0 104·1	97:1 -15:0 112:1	93 <sup>-3</sup> - 7 <sup>-2</sup> 100 <sup>-5</sup>	91·3 -17·9 103·2	93 4 -21 2 114 6	90 7 - 9 9 111 1
$63^{\circ}46^{\circ}$ $17^{\circ}84^{\circ}$ $32^{\circ}6^{\circ}$	72-80 54-96 17-84 28-2	61·40 47·16 17·24 32·0	$\begin{array}{c} 33 \ 15 \\ 10.76 \\ 22 \ 3 \end{array}$	22:98 12:56 23:9	16:70 37-6	17:51 35:0	17 48 31 4	16.21 36.0	17:58 58 9	17:26 36:9	16:27 34:3
$\begin{array}{r} 29.6469 \\ + 0.0305 \\ 29.909 \\ 29.442 \\ 0.467 \end{array}$	29: 6723 — 0060 29: 935 29: 041 0: 894	29 7562 - 1091 30 127 29 426 0 701	29 6039 0220 30 196 28 900 1 206	29 6360 0128 30 216 29 179 1 <u>1</u> 037	$\begin{array}{c} 29 \ 6213 \\ + \ 0014 \\ 30.224 \\ 28.802 \\ 1.422 \end{array}$	29:6368 + :0169 50:403 28:657 -1:746	29 6216 0017 30 218 28 732 1 486	$^{29.6319}_{+\ 0120}_{30.353}_{28.779}_{-1.574}$	29 6382 + 0153 30 422 25 734 1 688	$\begin{array}{c} 29 & 6171 \\ -0028 \\ 30 \cdot 240 \\ 28 & 746 \\ 1 \cdot 4 \cdot 4 \end{array}$	29: 6246 
$+\frac{76}{2}$	$+\begin{array}{c} 78 \\ 1 \end{array}$	83 ÷ 5	$+ \begin{array}{c} 81 \\ 1 \end{array}$	$-{79 \atop 3}$	76 0	76 0	76 0	76 0	- <sup>75</sup>	<sup>75</sup>	76 0
0:586 63:5	0:470 57:2	0°386 5 <b>1°</b> 9	0·196 31 0	0:135 25:0	0 295 44 6	0:279 43:1	0 289 44 1	0 274 42 7	0 254 38:9	0 253 41 3	0°277 42 9
0.45 -0.05	_0:49	0:55 - :07	0:74 01	$^{+0.78}_{-0.02}$	$^{0.57}_{-0.04}$	0156 105	0°58 — 03	0.61	0 60 - 01	$-rac{0.57}{04}$	0:60 01
S 51 E 0 47 7 76 22 0	N 80 W 1 30 6 78 44 0	N 23 W 1 60 9 00 33 0	$\begin{array}{c c} N & 6\overset{\circ}{7} & W \\ & 3 & 92 \\ & 13 \cdot 17 \\ & 44 \cdot 0 \end{array}$	$\begin{array}{c} { m S} & 72^{\circ} { m W} \\ 7^{\circ} 31 \\ 13^{\circ} 11 \\ 41^{\circ} 0 \end{array}$	S 88 W 3 09 10 67 41 0	S 77 W 2 66 10 14 50 0	N 65 W 1.78 10.12 55 0	N 89 W 2 42 12 33 51 0	N 85 W 0 75 8 41 50 0	S 78 W 1 36 5 60 60 0	N 78 W 1:10 5:67 58 0
-0.011	1:425 -1:855 7	2 115 -0.316	3 025 +0 392 12	0°610 -0°973 4	22:130 -5:016 99	25:795 -1:351 105	23 800 -3:346 98	$\begin{array}{r} 27.737 \\ +0.591 \\ 110 \end{array}$	21:770 -5:376 104	22 532 -4 614 101	25.785 $-1.361$ $114$
		— 0 · 66	$+\ \frac{8.7}{4.02}$	$-11^{2\cdot 2}_{9}$	$+rac{74.6}{7.20}$	31·8 -45·60 40	71:3 + 3:90 53	$\begin{bmatrix} 47.4 \\ -20.00 \\ 43 \end{bmatrix}$	73 3 + 5:90 -43	$-12 & 60 \\ -12 & 60 \\ 48$	$^{37.8}_{-29.60}$
18 2	18	20 1	10 10	13 11	187 51	185 44	196 56	173 58	174 55	196 48	179 43
0 21	0 26	0 24	0 13	0 12	3 224	10 226	210	3 179	18 194	11 195	23 199
8	8 2	2 8	1	0	34 29	29 31	34 26	19 28	25 30	23 33	36 50
278·8 434·5	213°8 376°3	170·1 340·2	97:9 286:9	74:3 274:3	2305 5 4463 3	2148 2 4463 3	2128 9 4463 3	1987 6 4463 3	214617 447414	2159°7 1463°3	2017:7 4163-3

## TEMPERATURE.

	1900.	Average of 60 years.	Extre	EMES.
Average temperature of the year	46 89 August. 71.57 February. 20.64	41 33 July. 67 71 January. 22 48	4 15 in 1898 July, 1898 70 80 Feb., 1875 10 16	40°77 in 1873 Aug., 1860 04°46 Feb., 1848 26°00
warmest and coldest months.  Average of deviations of monthly means from their respective averages of 60 years, signs of deviations being disregarded.  Month of greatest deviation without regard to sign.  Corresponding magnitude of deviation.  Warmest day	50.93 3.75 October. 9.12 8. Aug.		July, 14, 1868	July 31, 1844
Average temperature of the warmest day.  Coldest day.  Average temperature of the coldest day.  Date of the highest temperature.  Highest temperature.  Date of lowest temperature.  Lowest temperature.  Range of the year.	84.07 26 Feb. -4.15 6 Aug. 98.0 26 Feb. -9.6 107.6	-2·20 91·00	84 50 Feb 6, 1855 Jan. 22, 1859 -14 33 Aug 24, 1854 9 2 Jan. 10, 1859 -26 5 103 24	72.75 {Dec. 22, '42 9.57 Aug. 19, 1840 82.4 Jan. 2, 1842 1.9 87.0

## BAROMETER.

	1900.	Average of 59 years.	Extr	EMES.
Average pressure of the year  Month of the highest average pressure.  Highest monthly average pressure.  Month of the lowest average pressure.  Lowest Monthly average pressure.  Date of the highest pressure in the year  Highest pressure.  Date of the lowest pressure in the year  Lowest pressure.  Range for the year.	in. 29.6213 October. 29.7562 July. 29.5607 27. Feb 30.224 22. Feb. 28.802	in. 29 6199 Sentember 29 6663 June 29 5731 30 356 28 702 1 654	in. 29.6079 in 1849 Jan., 1849 29.8046 March, 1859 29.4143 Jan. 8, 1856 Jan. 2, 1877 28.166 22.240 in 1893	in. 29.5602 in 1864 June, 1864 29.6525 Nov., 1859 20.5886 Mar. 7, 1878 30.189 June, 2, 1894 29.035 1.303 in 1845

## RELATIVE HUMIDITY.

	Average of Extre 59 years.		EMES.	
Average humidity of the year Month of greatest humidity. Greatest average meuthly humidity. Month of least humidity. Least average monthly humidity.	76 October. 83 May. 66	January. 83 May. 70	82 in 1851 Jan., 1857 89 Feb., 1843	73 in 1858 Dec., 1858 81 April, 1849

## FOR THE YEAR 1900.

## EXTENT OF SKY CLOUDED.

	1900.	Average of 47 years.	Extr	EMES.
Average cloudiness of the year	0.78 June	0.61 December 0.76 July 0.50	0 66 in '59 '77 0 '89 0 '50	0.56 in 1899 0.73 0.59

## WIND.

_	1900,	Average of 17 years.	Extremes.
Resultant direction. Resultant velocity in miles. Average velocity without regard to direction Month of greatest average velocity. Greatest monthly average velocity. Month of least average velocity. Least monthly average velocity. Lay of greatest average velocity. Greatest daily average velocity. Least daily average velocity. Least daily average velocity. Least daily average velocity.  Hour of greatest absolute velocity.  Greatest velocity.	3:09 10:67 February 14:29	N. 61° W. 2°51 9 64 March 11 49 July 7 56 28°98	12 33 in 1897 S 32 in 1878 April, 1889 Dec., 1875 17 01 0 42 July, 1878 July, 1881 5 93 Nov. 17, 1870 Feb. 10, 1885 41 07 Feb. 10, 1885 9 to 10 a.m. 10 to 11 a m, 64 0 39 10

Note. - During the year 1900, the wind has been obtained from the records of the anemograph at Stanley Barracks, and no comparison has been made with the results of former years.

## RAIN.

	1900.	Average of 60 years.	Extremes.
Total depth of rain in inches.  Number of days on which rain fell.  Mouth in which the greatest depth of rain fell.  Greatest depth of rain in one mouth.  Mouth in which the days of rain were most frequent.  Greatest number of rainy days in one mouth.  Day on which the greatest amount of rain fell.  Greatest amount of rain in one day.	99 November 3°025 July Nov. 12	3 280 October 13	9 760 2 655 Jan., 1869 May, 1841 23 11

## SNOW.

-	1900,	Average. of 57 years.	EXTREMES.
Total depth of -now in inches	42	67 4 66 January 17 2	122 9 in 1870 34 6 in 1888 87 in 1859 33 in 1848 March, 1870 Jan,, 1895 62 4 10 5
trequent. Greatest number of days of snow in one month. Day in which the greatest amount of snow fell	January 12 28 Febv.	January 15 - }	$\begin{array}{cccc} & \textbf{Dec.} \ 1872 & \textbf{Feb.,} \ 1848 \\ & \begin{array}{ccccccccccccccccccccccccccccccccccc$
Greatest fall of snow in one day	10 0	8.8	16 0 3.0

## SUNSHINE.

	1900.	Average 1882 to 1899
Total duration of bright sunshine in hours Ratio to possible amount. Month of greatest relative amount Raito to possible amount. Month of least relative amount. Ratio to possible amount. Satio to possible amount. Vaunber of days completely clouded. Day of greatest relative amount. Ratio to possible amount.	2305 5 0 52 June 0 70 December 0 27 51 July 13, 0 92	2052 4 0 46 July 0 60 December 0 22 62 0 91

# DIFFERENCES OF CERTAIN METEOROLOGICAL ELEMENTS FOR 1900 FROM THE NORMAL VALUES FOR EACH QUARTER AND YEAR.

	Bar.	Tem.	Rain.	Days Rain.	ow. Days	Cloud- ed Sky.
Winter Spring Spring Summer Autumn Year	$^{+}$ :0106 $^{+}$ :0030 $^{+}$ :0248	$\begin{array}{c} + & 3 \cdot 15 \\ + & 3 \cdot 65 \\ + & 4 \cdot 67 \end{array}$	$ \begin{array}{rrr}  & 2 & 715 \\  & 2 & 057 \\  & 0 & 897 \end{array} $	- 7.90 - - 3 48 - - 4 75 -	$\frac{2}{8} \frac{51}{03} - \frac{3.94}{10.54}$	$ \begin{array}{rrr}  & 6.00 \\  & 2.67 \\  & 2.00 \end{array} $

## PERIODICAL OR OCCASIONAL EVENTS, 1900.

January 4. 11.	Chickader and Woodpecker seen.
February	Heavy snow storm, making good sleighing.  Splendid Solar halo and mock suns.  Coldest day of year, mean temperature 4.15° below zero.
March 5.	Evening Grosbeaks.
6.	Heaviest rainstorm of year, 1'440 inches.
20.	Robins, Woodpeckers.
21. 29.	Last sleighing.
31.	Ice broken up on Bay. First vessel entered harbour.
April 1.	Gulls flying north-east, Blue Birds, Ruby Crowned Kinglet, Plover.
5.	Bronzed Grackles, Song Sparrow.
10.	Meadow Larks.
12.	Earth Worms above ground.
15.	Juncoe, Hepatica in bloom.
16. 17.	Crocus in bloom, Butterflies. Flickers, Olive Backed Thrush, Phoebe, Soft Maple in bloom,
14.	Frogs piping.
18.	First thunder storm of year. Crowfoot in bloom.
20.	Heavy hoar frost.
22.	Towhee, Kingfisher, Bittern, Swallows, Reed Birds. Elm in
	bloom.
24. 27.	House Wren. Willow in bloom.  Ash, Cottonwood, Arbutus and Red Maple in bloom. First Cater-
<i>21</i> .	pillar out.
30,	Willow, Elder and Horse Chestnut shewing a few leaves.
May 1.	Dandelion in bloom.
2.	Brown Thresher.
1.	Thin ice.
6.	Whip-poor-will.
7.	Cow Birds common, Blackburnian Warbler, Black Throated Warbler, RedStart, Cat Bird, Veery, Black and White Warbler.
	Orioles,
8.	Tree Creepers common, Chimney Swifts.
10.	Chestnut Sided Warbler, King Birds, White Crowned Sparrow.
12. 13.	Hoar frost. Wild Violet and Marsh Mallow in full bloom. Choke Cherry,
1	Blueberry, Wild Strawberry and Stone Crop in bloom, Pear in
	bloom.
14.	Plum in bloom, Japonica in bloom. Night Hawks.
15.	Apple in bloom. Flowering Currant in bloom.
19.	Lilacs and Flowering Almond in bloom.
23. 28.	Horse Chestnut in bloom. Hawthorn in bloom.
June	Wild Raspberry in bloom.
August 8.	Warmest day of year, mean temperature 84 1°. Heat has been
8	so prostrating that many factories shut down, and the death
	rate among infants and old people largely increased.
September,	Heavy gale from North-west.
October	Bronzed Grackles very numerous. Hoar frost.
11.	Swallows last seen.
22.	Bright Meteor 10.4 p. m. from south-east to north-west
November	First snow,
13.	First sleighing.
15. 21.	Don River frozen.
——————————————————————————————————————	Last thunder storm of year. Bay frozen over
1. Compar	2007 11 10 10 10 10 10 10 10 10 10 10 10 10

